A. AMENDMENTS TO CLAIMS

Please cancel Claims 2 and 43 and amend the claims as indicated hereinafter.

1.   (CURRENTLY AMENDED) A method for measuring client-side performance, the
method comprising:
intercepting an item generated by an application program and that is to be sent to a client
process prior to arrival of the item at the client process;
modifying the item transparently with respect to the application program to produce a
modified item that includes code which causes one or more processors on a client
device to perform the steps of:
measuring performance related to a service associated with the item, and
performing one or more acts based on a measurement resulting from said step of
measuring performance; and
sending the modified item to the client process.

2.   (CANCELED)

3.   (PREVIOUSLY PRESENTED) The method of Claim 1, wherein said steps
of measuring performance and performing one or more acts based on the
measurement are performed transparently with respect to a user of the client
process.

4.   (ORIGINAL) The method of Claim 1, said step of performing one or more
acts based on the measurement further comprising the step of sending data
indicating the measurement to an entity over a network.

5.   (ORIGINAL) The method of Claim 4, said step of sending the data to an
entity further comprising storing the data in a data structure that is
automatically sent to a server device associated with said service in response
to a later request from the client process for said service.

6.   (ORIGINAL) The method of Claim 5, wherein:

the client process is a web browser; and

the data structure is a cookie stored on the client device by the web browser.

7.   (ORIGINAL) The method of Claim 4, wherein:

the step of modifying the item includes adding code to the item that causes the client

process to issue a request; and

said step of sending data to an entity further comprises sending the request including the

data to a server device.

8.   (ORIGINAL) The method of Claim 7, wherein the request is for a particular

file and in response to the request for the particular file no change is made

by the client process to a page already rendered on a display of the client

device.

9.   (ORIGINAL) The method of Claim 4, further comprising storing the data

indicating the measurement in a log file on a server device.

10.   (ORIGINAL) The method of Claim 4, further comprising storing the data

indicating the measurement in a database of the entity on the network.

11.   (ORIGINAL) The method of Claim 1, further comprising the steps of:

receiving over a network data indicating the measurement from the client process; and

performing one or more acts based on the data indicating the measurement.

12.   (ORIGINAL) The method of Claim 11, said step of performing one or more

acts based on the data indicating the measurement further comprising:

determining whether the data indicates performance has fallen below a

threshold; and

if the data indicates performance has fallen below the threshold, then

sending a notification message.

13.   (ORIGINAL) The method of Claim 1, said step of performing one or more

acts based on the measurement further comprising:

determining whether the measurement indicates performance has fallen
below a threshold; and

if the measurement indicates performance has fallen below the threshold,
then sending a notification message.

14.   (ORIGINAL) The method of Claim 13, said step of sending a notification message comprising sending the notification message to an administrator for a server device associated with said service.

15.   (ORIGINAL) The method of Claim 13, said step of sending a notification message comprising sending the notification message to a user of the client process.

16.   (ORIGINAL) The method of Claim 1, wherein the measurement is a client response time between a first time when a user of the client process selects an item on a first web page rendered on a display of the client device and a second time when a second web page is fully rendered on the display of the client device.

17.   (ORIGINAL) The method of Claim 1, wherein:

the code further causes the one or more processors on the client device to
perform the step of collecting ancillary information relating to one or
more components of the client process that participate in obtaining
the service from the application; and

said step of performing one or more acts based on the measurement includes
correlating the measurement with the ancillary information.

18.   (PREVIOUSLY PRESENTED) The method of Claim 1, after said step of intercepting the item and before said step of modifying the item, further comprising the steps of:

determining a type associated with the item; and

determining whether to perform said step of modifying the item based on
the type of the item.

19. (PREVIOUSLY PRESENTED) The method of Claim 1, after said step of intercepting the item and before said step of modifying the item, further comprising the steps of:

determining a unique reference associated with the item; and

determining whether to perform said step of modifying the item based on whether the unique reference matches a particular reference.

20. (PREVIOUSLY PRESENTED) The method of Claim 1, further comprising:

after said step of intercepting the item and before said step of modifying the item,

determining a percentage of total items sent to the client process that are to be modified; and

determining whether to perform said step of modifying the item based on the percentage.

21. (ORIGINAL) The method of Claim 1, wherein:

the item to be sent to the client process is stored in a cache before the item is sent to the client process;

said step of intercepting the item comprises accessing the item in the cache; and

said step of sending the modified item to the client process comprises replacing the item in the cache with the modified item.

22. (ORIGINAL) The method of Claim 21, wherein the cache is on a server device associated with said service.

23. (ORIGINAL) The method of Claim 21, wherein the cache is on a proxy server for the client process.

24. (ORIGINAL) The method of Claim 1, wherein:

the item includes hypertext markup language (HTML) statements; and

the client process is a web browser.

25. (ORIGINAL) The method of Claim 24, wherein:

the web browser is configured to run javascript; and

the code comprises javascript statements.

26. (ORIGINAL) The method of Claim 1, wherein the code conforms to a scripting language.

27. (ORIGINAL) The method of Claim 1, wherein the code comprises a Java applet.

28. (ORIGINAL) The method of Claim 1, wherein the code comprises an ActiveX module.

29. (ORIGINAL) The method of Claim 1, said step of modifying the item further comprising appending the code to the end of the item.

30. (ORIGINAL) The method of Claim 1, wherein:

the item includes markup language statements; and

said step of modifying the item further comprises inserting the code at a particular statement of the markup language statements.

31. (ORIGINAL) The method of Claim 1, wherein:

the code includes at least one of first code added to a first item and second code added to a second item; and

said measuring performance comprises starting a time measurement based on the first code and ending a time measurement based on the second code.

32. (ORIGINAL) The method of Claim 31, wherein:

the first code is executed in response to a user of the client process clicking on a control included in the first item; and

the second code is executed in response to fully loading the second item.

33. (ORIGINAL) The method of Claim 1, wherein the code includes first code executed upon arrival of the first code at the client process and second code

executed in response to a data structure generated by the client process after arrival of the first code.

34.   (ORIGINAL) The method of Claim 33, wherein the data structure describes an event at the client device.

35.   (ORIGINAL) The method of Claim 34, wherein the event is a message received from an operating system executing on the client device.

36.   (ORIGINAL) The method of Claim 34, wherein the event is a manipulation of a control of the client device by a user.

37.   (ORIGINAL) The method of Claim 33, wherein the second code causes the one or more processors to perform the step of measuring performance.

38.   (ORIGINAL) The method of Claim 33, wherein the second code causes the one or more processors to record a current time.

39.   (PREVIOUSLY PRESENTED) The method of Claim 33, wherein:
the item to be sent to the client process includes third code to be executed in
        response to the data structure generated by the client process; and
the first code causes the one or more processors to perform the step of
        replacing the third code with the second code.

40.   (ORIGINAL) The method of Claim 1, wherein the code includes first code executed in response to a data structure describing a first event generated by the client process and second code executed in response to a data structure describing a second event generated by the client process.

41.   (PREVIOUSLY PRESENTED) The method of Claim 40, wherein:
the item to be sent to the client process includes third code to be executed in
        response to the data structure describing the second event by the
        client process; and
the first code causes the one or more processors to perform the step of
        replacing the third code with the second code.

42. (CURRENTLY AMENDED) A computer-readable medium carrying instructions for measuring client-side performance, wherein execution of the instructions by one or more processors causes:

intercepting an item generated by an application program and that is to be sent to a client process prior to arrival of the item at the client process;

modifying the item transparently with respect to the application program to produce a modified item that includes code which causes one or more processors on a client device to perform the steps of:

measuring performance related to a service associated with the item, and

performing one or more acts based on a measurement resulting from said step of measuring performance; and

sending the modified item to the client process.

43. (CANCELED)

44. (PREVIOUSLY PRESENTED) The computer-readable medium of Claim 42, wherein said steps of measuring performance and performing one or more acts based on the measurement are performed transparently with respect to a user of the client process.

45. (ORIGINAL) The computer-readable medium of Claim 42, said step of performing one or more acts based on the measurement further comprising the step of sending data indicating the measurement to an entity over a network.

46. (ORIGINAL) The computer-readable medium of Claim 45, said step of sending the data to an entity further comprising storing the data in a data structure that is automatically sent to a server device associated with said service in response to a later request from the client process for said service.

47. (ORIGINAL) The computer-readable medium of Claim 46, wherein:

the client process is a web browser; and

the data structure is a cookie stored on the client device by the web browser.

48.   (ORIGINAL) The computer-readable medium of Claim 45, wherein:

the step of modifying the item includes adding code to the item that causes the client

process to issue a request; and

said step of sending data to an entity further comprises sending the request including the

data to a server device.

49.   (ORIGINAL) The computer-readable medium of Claim 48, wherein the

request is for a particular file and in response to the request for the particular

file no change is made by the client process to a page already rendered on a

display of the client device.

50.   (ORIGINAL) The computer-readable medium of Claim 45, wherein

execution of the one or more sequences of instructions by the one or more

processors further causes the one or more processors to perform the step of

storing the data indicating the measurement in a log file on a server device.

51.   (ORIGINAL) The computer-readable medium of Claim 45, wherein

execution of the one or more sequences of instructions by the one or more

processors further causes the one or more processors to perform the step of

storing the data indicating the measurement in a database of the entity on the

network.

52.   (ORIGINAL) The computer-readable medium of Claim 42, wherein

execution of the one or more sequences of instructions by the one or more

processors further causes the one or more processors to perform the steps of:

receiving over a network data indicating the measurement from the client process; and

performing one or more acts based on the data indicating the measurement.

53.   (ORIGINAL) The computer-readable medium of Claim 52, said step of

performing one or more acts based on the data indicating the measurement

further comprising:

determining whether the data indicates performance has fallen below a

threshold; and

if the data indicates performance has fallen below the threshold, then
  sending a notification message.

54. (ORIGINAL) The computer-readable medium of Claim 42, said step of
     performing one or more acts based on the measurement further comprising:
     determining whether the measurement indicates performance has fallen
         below a threshold; and
     if the measurement indicates performance has fallen below the threshold,
         then sending a notification message.

55. (ORIGINAL) The computer-readable medium of Claim 54, said step of
     sending a notification message comprising sending the notification message
     to an administrator for a server device associated with said service.

56. (ORIGINAL) The computer-readable medium of Claim 54, said step of
     sending a notification message comprising sending the notification message
     to a user of the client process.

57. (ORIGINAL) The computer-readable medium of Claim 42, wherein the
     measurement is a client response time between a first time when a user of
     the client process selects an item on a first web page rendered on a display
     of the client device and a second time when a second web page is fully
     rendered on the display of the client device.

58. (ORIGINAL) The computer-readable medium of Claim 42, wherein:
     the code further causes the one or more processors on the client device to
         perform the step of collecting ancillary information relating to one or
         more components of the client process that participate in obtaining
         the service from the application; and
     said step of performing one or more acts based on the measurement includes
         correlating the measurement with the ancillary information.

59. (PREVIOUSLY PRESENTED) The computer-readable medium of Claim
     42, wherein execution of the one or more sequences of instructions by the

one or more processors further causes the one or more processors, after said step of intercepting the item and before said step of modifying the item, to perform the steps of:

determining a type associated with the item; and

determining whether to perform said step of modifying the item based on the type of the item.

60.   (PREVIOUSLY PRESENTED) The computer-readable medium of Claim 42, wherein execution of the one or more sequences of instructions by the one or more processors further causes the one or more processors, after said step of intercepting the item and before said step of modifying the item, to perform the steps of:

determining a unique reference associated with the item; and

determining whether to perform said step of modifying the item based on whether the unique reference matches a particular reference.

61.   (PREVIOUSLY PRESENTED) The computer-readable medium of Claim 42, wherein execution of the one or more sequences of instructions by the one or more processors further causes the one or more processors, after said step of intercepting the item and before said step of modifying the item, to perform the steps of:

determining a percentage of total items sent to the client process that are to be modified; and

determining whether to perform said step of modifying the item based on the percentage.

62.   (ORIGINAL) The computer-readable medium of Claim 42, wherein:

the item to be sent to the client process is stored in a cache before the item is sent to the client process;

said step of intercepting the item comprises accessing the item in the cache; and

said step of sending the modified item to the client process comprises
replacing the item in the cache with the modified item.

63. (ORIGINAL) The computer-readable medium of Claim 62, wherein the cache is on a server device associated with said service.

64. (ORIGINAL) The computer-readable medium of Claim 62, wherein the cache is on a proxy server for the client process.

65. (ORIGINAL) The computer-readable medium of Claim 42, wherein:
the item includes hypertext markup language (HTML) statements; and
the client process is a web browser.

66. (ORIGINAL) The computer-readable medium of Claim 65, wherein:
the web browser is configured to run javascript; and
the code comprises javascript statements.

67. (ORIGINAL) The computer-readable medium of Claim 42, wherein the code conforms to a scripting language.

68. (ORIGINAL) The computer-readable medium of Claim 42, wherein the code comprises a Java applet.

69. (ORIGINAL) The computer-readable medium of Claim 42, wherein the code comprises an ActiveX module.

70. (ORIGINAL) The computer-readable medium of Claim 42, said step of modifying the item further comprising appending the code to the end of the item.

71. (ORIGINAL) The computer-readable medium of Claim 42, wherein:
the item includes markup language statements; and
said step of modifying the item further comprises inserting the code at a
particular statement of the markup language statements.

72.   (ORIGINAL) The computer-readable medium of Claim 42, wherein:

the code includes at least one of first code added to a first item and second

   code added to a second item; and

said measuring performance comprises starting a time measurement based

   on the first code and ending a time measurement based on the second

   code.

73.   (ORIGINAL) The computer-readable medium of Claim 72, wherein:

the first code is executed in response to a user of the client process clicking

   on a control included in the first item; and

the second code is executed in response to fully loading the second item.

74.   (ORIGINAL) The computer-readable medium of Claim 42, wherein the

code includes first code executed upon arrival of the first code at the client

process and second code executed in response to a data structure generated

by the client process after arrival of the first code.

75.   (ORIGINAL) The computer-readable medium of Claim 74, wherein the data

structure describes an event at the client device.

76.   (ORIGINAL) The computer-readable medium of Claim 75, wherein the

event is a message received from an operating system executing on the

client device.

77.   (ORIGINAL) The computer-readable medium of Claim 75, wherein the

event is a manipulation of a control of the client device by a user.

78.   (ORIGINAL) The computer-readable medium of Claim 74, wherein the

second code causes the one or more processors to perform the step of

measuring performance.

79.   (ORIGINAL) The computer-readable medium of Claim 74, wherein the

second code causes the one or more processors to record a current time.

80.   (PREVIOUSLY PRESENTED) The computer-readable medium of Claim
       74, wherein:

       the item to be sent to the client process includes third code to be executed in
              response to the data structure generated by the client process; and
       the first code causes the one or more processors to perform the step of
              replacing the third code with the second code.

81.   (ORIGINAL) The computer-readable medium of Claim 42, wherein the
       code includes first code executed in response to a data structure describing a
       first event generated by the client process and second code executed in
       response to a data structure describing a second event generated by the
       client process.

82.   (PREVIOUSLY PRESENTED) The computer-readable medium of Claim
       81, wherein:

       the item to be sent to the client process includes third code to be executed in
              response to the data structure describing the second event by the
              client process; and
       the first code causes the one or more processors to perform the step of
              replacing the third code with the second code.

83.   (PREVIOUSLY PRESENTED) A method for responding to client-side performance on a
       network connecting a client device executing a client process to a server device
       configured to execute an application to provide a service, the method comprising the steps
       of:

       intercepting an item produced by the application;
       modifying the item transparently with respect to the application to produce a modified
              item including code which causes one or more processors on the client device to
              perform the steps of,
                   measuring performance related to the service provided by the application, and
                   based on a measurement resulting from said step of measuring performance,
                        sending data indicating the measurement to the server device;

sending the modified item to the client process;

receiving the data indicating the measurement;

storing the data indicating the measurement in a database; and

based on the data indicating the measurement,

> determining whether the data indicates performance has fallen below
> > a threshold, and
>
> if the data indicates performance has fallen below the threshold, then sending a
> > notification message.

84.   (ORIGINAL) A computer-readable medium carrying:

data indicating elements for presentation on a display of a device having one or more
> processors by a client process executing on the one or more processors;

a first sequence of instructions executed upon receipt at the device; and

a second sequence of instructions invoked after arrival of the first sequence of
> instructions by the client process,

wherein,

> the second sequence of instructions causes the one or more processors to perform
> > the steps of:
> >
> > measuring performance related to presenting the elements on the display;
> > > and
> >
> > performing one or more acts based on a measurement resulting from said
> > > step of measuring performance; and
>
> the first sequence of instructions causes the client process to associate the second
> > sequence of instructions with an element indicated by the data.